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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,308	02/06/2004	Nobuhiko Noma	P24207	7414
7055	7590	05/07/2007	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			YUN, EUGENE	
ART UNIT		PAPER NUMBER		
2618				
NOTIFICATION DATE		DELIVERY MODE		
05/07/2007		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com  
pto@gbpatent.com

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/772,308	NOMA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Eugene Yun	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-8 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 06 February 2004 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Kerpez (US 2003/0108191).

Referring to Claim 1, Kerpez teaches An ADSL modem apparatus comprising: an exchange unit that transmits and receives a REVERB signal according to one of the ITU-T standard G.992.1 and G.992.2 (see paragraph [0016] where the process of selecting lower and upper notch frequencies that provide the greatest data transmission rate in a correlation between the lower and upper notch frequencies and the length is similar process to the above limitation); and

an estimation unit that estimates a communication distance to an opposing ADSL modem apparatus according to a reception level of the REVERB signal (see paragraph [0037]).

Referring to Claim 7, Kerpez teaches a communication method for an ADSL modem apparatus, the method comprising:

receiving a REVERB signal according to one of the ITU-T standard G.992.1 and G.992.2 (see paragraph [0016] where the process of selecting lower and upper notch frequencies that provide the greatest data transmission rate in a correlation between the lower and upper notch frequencies and the length is similar process to the above limitation);

estimating a communication distance to an opposing ADSL modem apparatus according to a reception level of the REVERB signal (see paragraph [0037]); and concentrating signal energy into a low frequency band, the signal energy being assigned to a transmission signal according to the estimated communication distance (see paragraph [0037]).

Referring to Claim 2, Kerpez also teaches estimating the communication distance to the opposing ADSL modem apparatus by comparing reception levels of two carriers, the carriers being selected from a plurality of carriers that configure the REVERB signal (see first 10 lines of paragraph [0038]).

Referring to Claim 3, Kerpez also teaches a communication unit that communicates by concentrating signal energy into a low frequency band, the signal energy being assigned to a transmission signal according to the communication distance estimated by said estimation unit (see lines 6-12 of paragraph [0038]).

Referring to Claims 4 and 8, Kerpez also teaches said communication unit minimizing the signal energy assigned to a high frequency band and increasing increasing the signal energy assigned to the low frequency band, when the

communication distance to the opposing ADSL modem apparatus is increased (see paragraph [0034]).

Referring to Claim 5, Kerpez also teaches the ADSL modem apparatus located at a remote side, and wherein the communication distance between the remote side ADSL modem apparatus and a center side ADSL modem apparatus is estimated (see paragraph [0031]).

Referring to Claim 6, Kerpez also teaches the ADSL modem apparatus located at a center side, and wherein the communication distance between the center side ADSL modem apparatus and a remote side ADSL modem apparatus is estimated (see paragraph [0032]).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eugene Yun whose telephone number is (571) 272-7860. The examiner can normally be reached on 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on (571)272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Eugene Yun  
Examiner  
Art Unit 2618

EY



MATTHEW ANDERSON  
SUPERVISORY PATENT EXAMINER